

# Leica

PHOTOGRAPHY



1958 • Number 1

# Leica PHOTOGRAPHY

EDITORIAL OFFICE: 408 4TH AVENUE, NEW YORK 16, NEW YORK

Dear Leica Owner:

For many years all registered Leica owners have received LEICA PHOTOGRAPHY free. But paper and printing costs have spiraled and the size of the Leica family has more than doubled in the past few years. Despite this increasing financial burden, we did not believe you would want to see the publication discontinued. Therefore, we have had to find another solution.

The publication of the magazine will be continued under the same high standards as in the past. However, we must now ask for a small subscription price -- actually less than cost. Limited free subscriptions will be given to purchasers of new Leica cameras and Leitz lenses as outlined below. However, the next issue to be mailed will be the last to be sent free to our present list of registered owners. To get future issues of LEICA PHOTOGRAPHY, you must fill out the enclosed card, either to subscribe or to qualify for free copies if you have made a recent purchase of new equipment. Our current mailing list will be dropped.

## SUBSCRIPTION RATES

Subscription rates for the United States and its territorial possessions, including APO and FPO addresses, are as follows:

\$1.00 for 1 year (4 issues)  
\$2.50 for 3 years (12 issues)

## THE NEW PLAN FOR FREE SUBSCRIPTIONS

Bought and Registered After January 1, 1958

Purchasers of new\* Leica cameras and lenses who registered this new equipment with us after January 1, 1958 will be placed on the free subscription list for limited periods. The free period will be three (3) years for registration of a new\* Leica camera and two (2) years for a new\* Leitz lens. These free periods will not be cumulative. The registration of each new item will establish a new expiration date without regard for any unexpired free subscription period (an exception is that the existing expiration date will never be shortened).

This is a letter which all Leica Photography readers received a short time ago. Because it is so important, we are re-printing it here as a reminder to act at once if you want to keep on receiving the magazine. Remember—you must fill out and return the Business Reply Card you received with the original letter to continue to receive Leica Photography. If you have misplaced this card, use the form on page 29 of this issue.

(CONTINUED ON INSIDE BACK COVER)



# Leica

## PHOTOGRAPHY

VOLUME 11 • NUMBER 1 • 1958

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### contents:

ONE-MAN SHOW	
C. G. CHRISTOFIDES .....	4
NEW: BRAUN HOBBY "SPECIAL A.M."	
ELECTRONIC FLASH IMPROVEMENTS .....	8
THE CREATIVE SCOPE OF A NEW LENS	
LEITZ DUAL-RANGE SUMMICRON .....	10
CHILDREN—TWO APPROACHES	
MARC SLADE—EDWARD WALLOWITCH .....	14
DOES THIS LOOK FAMILIAR?	
Maynard Frank Wolfe .....	20
A NOMOGRAPH—FOR YOUR CONVENIENCE	
Hy Becker .....	23
FOUR "IMPOSSIBLE" PICTURES	
LEICA PHOTOGRAPHS .....	25
PARALLAX	
Arthur Kramer .....	28
FOCUSING ON .....	30



### COVER

#### Curtis E. Moussie

A Braun Hobby Automatic electronic flash and two large reflectors placed in the foreground, provided the illumination for this close-up portrait made with the 135mm Hektor lens on a IIIf. Exposure was at f/8 on Kodachrome film, Daylight Type.

Unavoidable difficulties prevented the appearance of a fourth issue of Leica Photography in 1957. Therefore, paid subscriptions covering that issue automatically will be extended one issue.

*Leica Photography* is published by E. Leitz, Inc., at 468 Fourth Avenue, New York 16, N. Y., as a quarterly magazine, price forty cents. Copies are sent free of charge to all registered Leica camera owners residing within the United States of America and U.S. Territorial Possessions, for a limited time, based upon date of purchase of Leica camera and/or Leitz lens. Thereafter and to non-owners of Leica cameras, a subscription fee of \$1.00 per year is charged in the U.S.A., and \$2.00 elsewhere. Single copies are on sale at photographic dealers' stores, or direct from the publisher.

The editors are happy to consider original articles on photography with the Leica and photographs taken with Leica cameras and lenses. All manuscripts and photographs should be accompanied by stamped, self-addressed return labels.



## one-man show

C. G. CHRISTOFIDES, amateur

*Appearing here from time to time:  
selections from the finest work of  
photographers in different fields.*

C. G. Christofides is a 29-year-old assistant professor at the State University of Iowa, who formerly taught at the University of Michigan.

As an amateur photographer, he rose from beginner to award winner in little more than a year, winning prizes from art exhibitions as well as from photo competitions.

Christofides' interest in photography was fostered by a lifelong interest in painting and aesthetics. His first serious attempts at photography began in 1953, when he plunged into studying techniques. Reversing the traditional order of enthusiasm, he took color pictures first, then succumbed to the challenge of black-and-white. His current color work, however, involves experiments with color distortion, rather than "straight" pictures.

Within the first year of his interest in photography, five of his prints were accepted for an exhibit sponsored by the Ann Arbor (Mich.) Art Association. Later in the same year, the Detroit Institute of Arts exhibit featured 285 works of art, including just 11 photographs, two of them by Christofides. The year 1954 also saw him win a national prize in the Newspaper National Photographic Awards contest.

His approach to photography is not typical of the amateur, for he sees his pictures with a photo-journalist's eye. Of his work, Christofides says:

"Out of the vast variety of photographic approaches, only the 'decisive moment' approach, as Cartier-Bresson terms it, has any validity for me...I gener-

ally shun postcard and still-life photography, pattern and architectural photography. I admire those photographers who are able to do this work beautifully, but I do not wish to do it myself.

"This does not mean that this ('decisive moment') approach alone may produce artistic photographs. If we define art as the point of excellence in the creative efforts of man, then all excellent photography is art...

"The photographer is bound by time and reality as no other artist is. Even though the photographer while photographing from the real world will make imaginative selections, his decisions relating to the photograph have to be made in a fraction of a second. There can be no revisions after the shutter is tripped. This limitation of time is what makes the work of the photographer important, as it calls for discipline, coordination, knowledge and instinct...

"A photograph to me, then, is the representation of a moment from the life of mankind in action, imaginatively conceived, aesthetically composed, so that the result may evoke in the spectator some of the feelings experienced by the photographer when... he decided that it was a picture worth taking."

Christofides, who holds a Master's degree in Romance Languages and a Doctorate in Comparative Literature, is now using a Leica M-3 exclusively. Of it, he says, "I am willing to debate (in English, French, Greek—ancient or modern—and Arabic) with anyone who claims that the Leica M-3 is not the perfect camera."

**Winter Scene, Iowa.** M-3, 50mm Summicron, 1/50 at f/4, ultra-high-speed film.





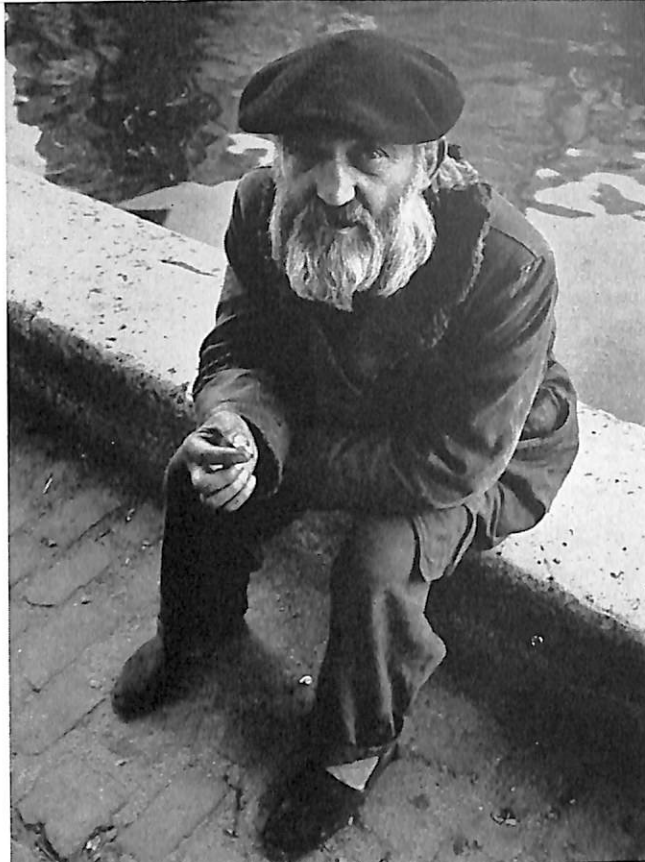


**Egyptian Women**, as seen from moving car. M-3, 35mm Summaron, 1/250 at f/11.

**Egyptian Woman**, "hiding" from the photographer. M-3, 35mm Summaron.

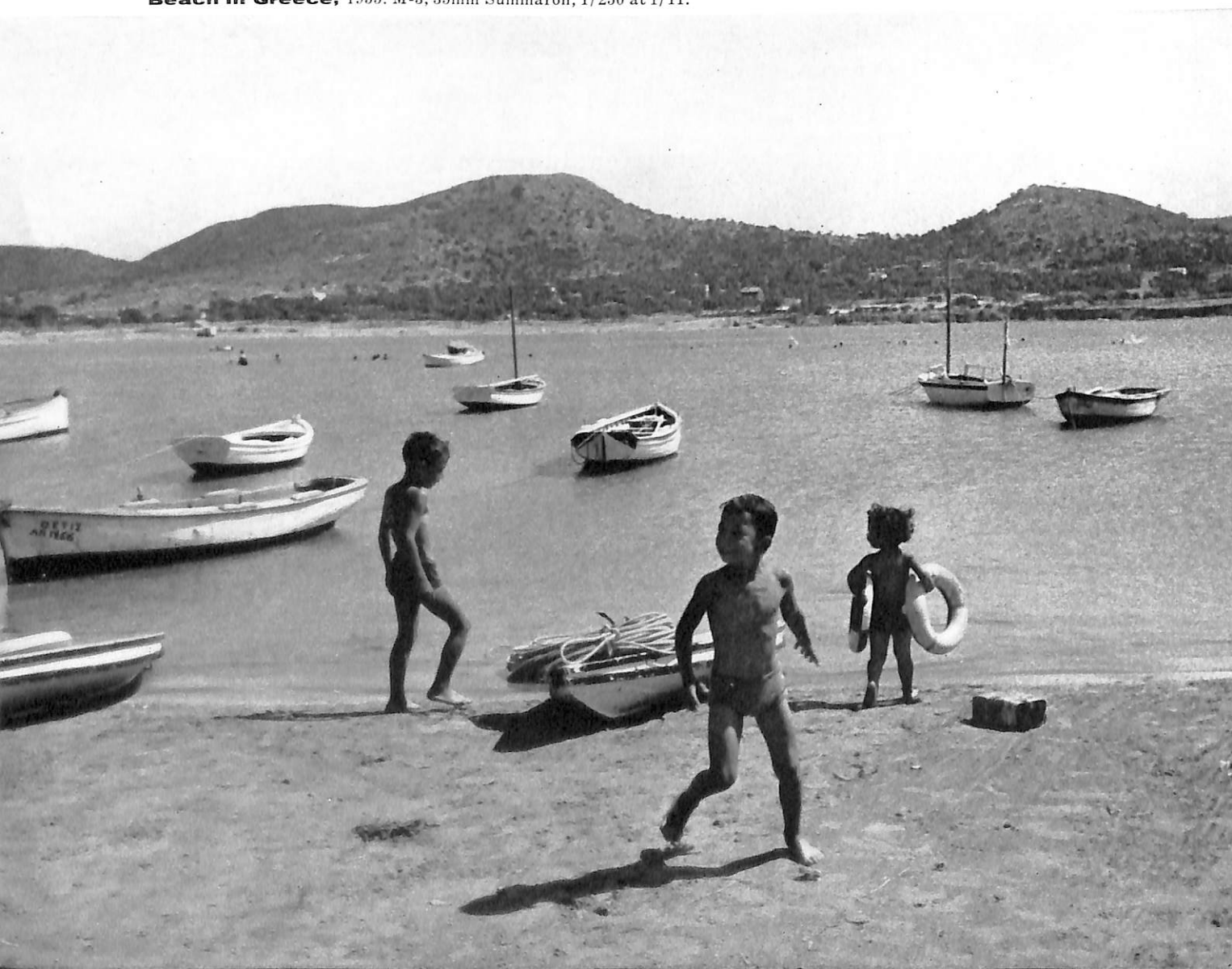


**one-man show** *(contd.)*



**Near A River, France.** M-3, 35mm Summaron.

**Beach In Greece, 1955.** M-3, 35mm Summaron, 1/250 at f/11.







**Mother And Child**, Athens. M-3, 35mm Summaron, 1/50 at f/8.

**Museum, Toledo, Ohio.** M-3, 50mm Summicron, 1/25 at f/2.



## new: Braun Hobby "Special A.M."

"Standard" and "Automatic" add features, also



With the advanced amateur photographer in mind, Max Braun, Frankfurt/Main, Germany, recently introduced the new Braun Hobby "Special A.M." The designation "A.M." (American Medium) indicates the importance to Braun of the American amateur's needs. The new "Special A.M." resembles the familiar "Standard," but offers 33 per cent greater light output. Its 80-watt-second power gives a Daylight Kodachrome guide number of 40.

The "Special A.M." operates on either A.C. or from a new 4-volt, 2-ampere-hour storage battery which is only 2½ x 2 x 1½". The battery slips into or out of place quickly without the need for connecting wires, a convenience for field operation, especially when a fresh spare battery is needed during a long shooting session. A voltage selector switch, which can be set without removing the housing, instantly adjusts A.C. voltage to 110, 125, 160, 220 or 250.

A foolproof battery-A.C. switch prevents the battery from being used when the A.C. line cord is connected. It also prevents the unit from being used on A.C. when the battery is in use.

### new reflector design

The "Special A.M." features several new conveniences in its reflector and flash-head handle. The famous variable-beam reflector now switches instantly from normal (50°) to wide-angle (70°) coverage with a quick twist. There is no need to loosen or tighten screws. The flash-head handle locks on the camera bracket automatically as you slide it into place; a push-button releases it instantly.

For testing or open-flash work there is a small firing button on the flash-head handle which fires the unit without involving the camera shutter.

A glow-lamp signals when the unit is ready to fire.

There is an on-off switch on the flash-head handle, for battery operation only. A multiple-flash head is available to increase the versatility of the "Special A.M."

The handsome housing of the "Special A.M." is Polystyron 51, a black, shock-resistant plastic, and the reflector is of virtually indestructible Polyamid plastic. Charge indicators of the battery are visible in the back of the housing, and a built-in charger makes maintenance simple and easy. The battery is automatically recharged when the "Special A.M." is used on A.C.; if extra charging is desired, you simply put the unit on A.C. Printed circuits are a feature of the "Special A.M." that gives it extra ruggedness.

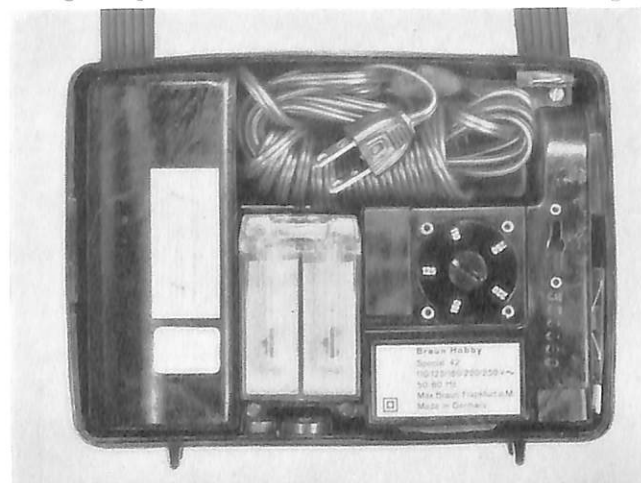
### other units improved

The "Standard A.S." and "Automatic A.A." are improved versions of previous Hobby models. The "Standard A.S." is the same as the former "Standard" but has the improved reflector and handle.

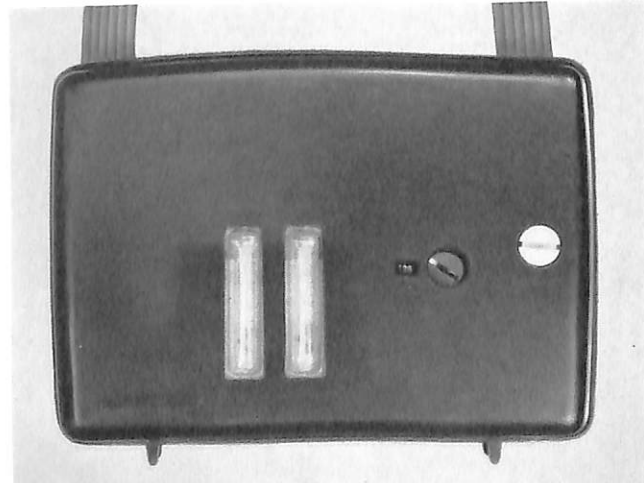
The "Automatic A.A." now offers 135 watt-seconds of power—one-third greater than the earlier model. The "Automatic A.A." also includes printed circuits. Another new design feature is a safety bar under the push-buttons which prevents accidental setting. The reflector and flash tube handle are similar to those of the "Special A.M." and "Standard A.S." However, the flash tube handle of the "Automatic A.A." now has two neon glow lamps, one to show readiness when the unit is used at half power, two for full power.

Price of the "Standard A.S." remains \$55.50 for the A.C. unit without battery or camera connecting cord. The "Special A.M." with battery but without connecting cord is \$79.50. The "Automatic A.A." with battery but without cord is \$106.00. Cords for Leicas, Rolleiflex and Rolleicord cameras are \$3.75. Cords for cameras with P-C outlets are \$2.75.

COMPACT INTERIOR of the new "Special A.M." (left) even provides storage compartment for A.C. line cord. When the housing is

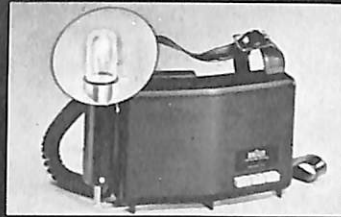


closed (right), battery charge indicators, voltage selector, and housing lock are all accessible from the rear of the unit.





# SPECIFICATIONS—Braun Hobby Electronic Flash Units



"Automatic A.A."



"Special A.M."



"Standard A.S."

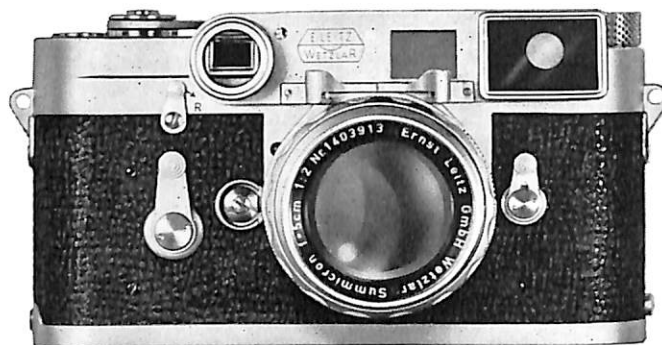
		Automatic A.A.		Special A.M.		Standard A.S.	
Dimensions		9 x 6 $\frac{5}{8}$ x 3"		7 $\frac{3}{4}$ x 5 $\frac{3}{4}$ x 3"		7 $\frac{3}{4}$ x 5 $\frac{3}{4}$ x 3"	
Weight		6 lbs. 12 $\frac{1}{2}$ oz.		4 lbs. 7 oz.		3 lbs. 12 oz. (as A.C. unit)	
Flash Duration		1/1000 sec.		1/1000 sec.		1/1000 sec.	
Color Temperature		5600°K. (matches daylight color film balance)		5600°K. (matches daylight color film balance)		5600°K. (matches daylight color film balance)	
Watt Seconds		Full-Power Position 135	Half-Power Position 60	80		60	
GUIDE NUMBER	50° Beam	Kodachrome (daylight type)	60	1 $\frac{1}{2}$ stops greater	40	35	
		Anscochrome or Ektachrome (daylight type)	95	1 $\frac{1}{2}$ stops greater	70	56	
		Super Anscochrome (daylight type)	170	1 $\frac{1}{2}$ stops greater	125	110	
		Black-and-White (ASA 100)	260	1 $\frac{1}{2}$ stops greater	180	160	
70° Beam			$\frac{1}{2}$ stop greater	$\frac{1}{2}$ stop greater plus above	$\frac{1}{2}$ stop greater	$\frac{1}{2}$ stop greater	
NUMBER OF FLASHES	A.C.		unlimited	unlimited	unlimited	unlimited	
	Dry Cells		—	—	—	50 (minimum)	
	Storage Battery; per charge		80-100	220	85	200	
RECYCLE TIME	110-v. A.C.		8-11 sec.	4 $\frac{1}{2}$ sec.	13 sec.	10 sec.	
	Dry Cells.		—	—	—	15-20 sec.	
	Storage Battery		8-11 sec.	7 sec.	6-7 sec.	10-12 sec.	
Multiple Flash Head Available		yes		yes		no	
Storage Battery Charger		built-in		built-in		accessory	



## the creative scope of a new lens

Dual-Range Summicron offers new convenience:  
quick changing from normal to close-up range

The fortunate owner of a Leica M-3 can have his photographic vision expanded in a unique way. The Dual-Range Summicron f/2 lens not only allows him to move up to within 19 inches of his subject but gives him new picture-taking convenience in the close-focusing range, a freedom that matches the traditional Leica ease and flexibility. The new 50mm lens offers the precision and rapidity of combined rangefinder-viewfinder focusing and the exactness of parallax-free bright-line framing in both ranges. In other words, with one lens, you can now shoot close-ups as quickly, conveniently, and accurately as you can shoot at normal distances, and check action and focus without interruption as you shoot.



HANDS IN ACTION, close up, may be the most commonly exploited theme of the Dual-Range Summicron, simply because hands are the most readily accessible action subjects in the lens' close-focusing range. The M-3 rangefinder-viewfinder offers uninterrupted control over focus and action.



Lew Parrella

MAN'S FACE AT 19 INCHES, in this case snatched unknown to the subject, can be a "pore-trait" or a picture with strong emotional values, depending on the photographer. This study was vividly rendered on Adox KB-17 film 1/60 sec. at f/5.6.



Walter Heun





*Lew Parrella*

STILL LIFE IN EXISTING LIGHT. In this case, flowers under a table lamp were photographed as found, at home. Rather than make a typical arrangement of picture elements, the photographer recognized the existing close-up possibilities.



INDUSTRIAL OPERATIONS, such as the assembly shown here, can be depicted with the Dual-Range Summicron with new ease and greater realism. The how-to-do-it photograph is also particularly suited to this close-up-in-action approach.

*Courtesy Ernst Leitz Wetzlar*

Consider the extraordinary aspects of the new lens: first, how the lens does it; second, what it can do for you.

The lens itself is a true innovation of Leitz designers. The optical system combines unsurpassed correction and freedom from vignetting in both the normal and close-focusing ranges. Even at  $f/2$ , it gives outstanding resolution, unusually high contrast, and an excellent degree of color correction. Recently formulated, highly refractive optical glasses used in the production of the Dual-Range Summicron contribute greatly to the remarkable results obtainable.

An optical viewing unit which slips onto the top of the lens mount converts the rangefinder for close focusing, reducing the angle of view for this range, and extending parallax correction to 19 inches. The lens itself goes on the M-3 in the normal way and is used in a normal way for the normal focusing range, from infinity to 3 feet, 4 inches. When it is desired to switch to the close-up range, 2 feet, 10 inches, to 19 inches, the focusing ring, which is spring-loaded, is pulled out and moved across a stop. The optical viewing unit will then slide in place. A safety device prevents improper operation of the lens, with or without viewing unit.

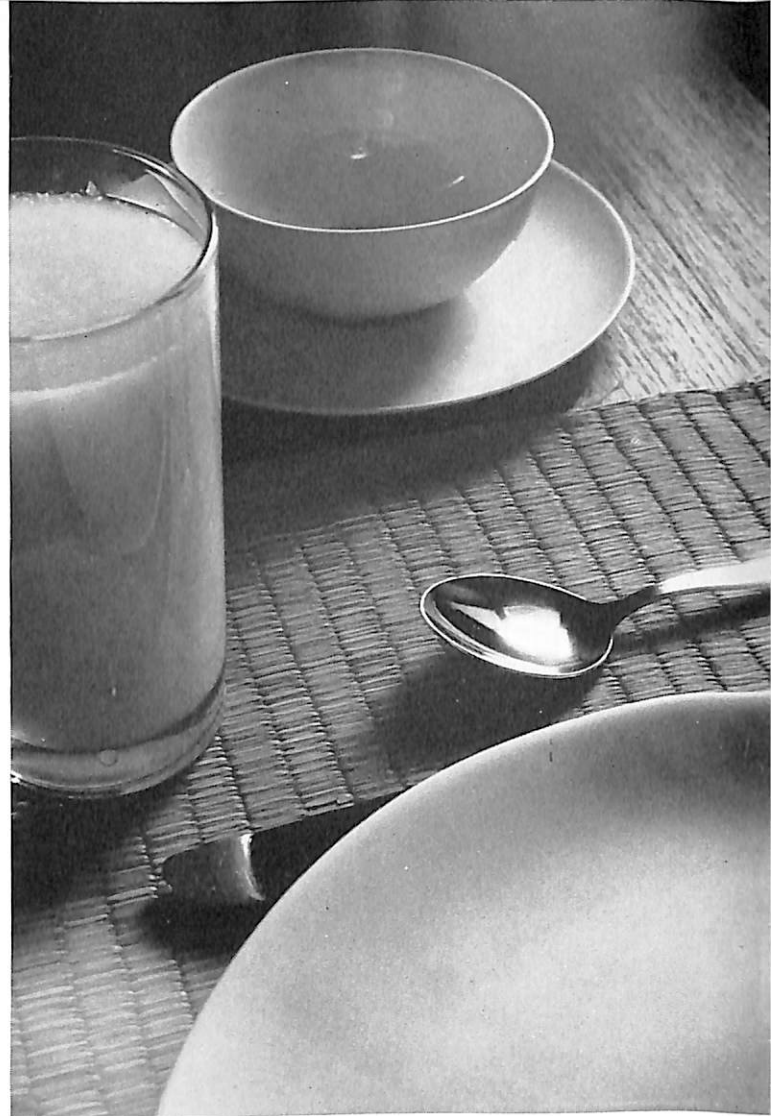
At 19 inches, the Dual-Range Summicron cuts a field approximately 7 by  $10\frac{1}{2}$  inches. At 34 inches, it outlines an area 14 by 21 inches. These figures give you an idea of the size of the "world" in which you would be working when sighting through the modified M-3 viewfinder. This brings us to the second consideration—what the lens can do for you. And we find that this 19-to-34-inches-away world is a challenging and unexploited realm—as far as spontaneity and realism go. We have worked this close before, but never with such ease.

Every kind of photographer will find a *métier* for this close-focusing range; to enumerate picture possibilities would be as dangerous as selecting subjects for someone else to photograph. The pictorial examples on these pages only begin to tell the story, and Leica M-3 owners who have already acquired the lens are just beginning to discover the potentials of the Dual-Range Summicron. However, we have compiled a list of general applications, keyed to some of the individual approaches to photography, and you can take it from there. Here they are:

**creative photography** The emotional and interpretive values of a face, hands, or anything close-up, especially in real action, or engrossed activity.

**documentary photography** Hands at work, "portraiture" through details.

**photojournalism** Telling details within the whole pic-



Lew Purcell

ture story—objects on an executive's desk, the tools of a craftsman, any revealing and informative close-up in existing light.

**advertising illustration** True spontaneity in depicting the product in use. All other fields mentioned here can be considered for advertising.

**pictorialism and the salon** A new ease in approaching the object or still life. The Dual-Range Summicron could unshackle the stiff and redundant images of yesterday, still seen in the monthly and annual exhibits.

**industrial photography** Hands or equipment or both, in action. Laboratory procedures and operations in vivid detail.

**fashion photography** A free and easy approach to gloves, shoes, accessories and jewelry.

**nature photography** Plants, rocks and natural textures can now be approached quickly if necessary.

**how-to-do-it photos** Editorial illustrations for home workshop, cooking and manual crafts can be depicted as actually happening.

**personal records** All of the foregoing fields have their counterparts in the amateur photographer's daily camera work. There are a thousand and one times when the hand-held Leica must move in close. At the museum, in the park, at work, on vacation, a quick copy of a page out of a book or a "grab shot" of a small object or texture observed "away from home," all of these are within the province of the Leitz Dual-Range Summicron.



SMALL MUSEUM PIECES require the hand-held Leica and Dual-Range Summicron to be recorded. This bust, about 8 inches high, a well-known forgery published as sculpture of the Fourth Egyptian Dynasty, is a hodge-podge carving after a portrait of Lady Nofret. It is displayed, among other examples of counterfeits and forgeries, at the Metropolitan Museum of Art, New York.



*Lew Parrella*

COMMERCIAL ILLUSTRATIONS can have a sense of immediacy and authenticity when made from Dual-Range Summicron's point of view. Camera flexibility is a distinct asset to the photographer who must work close and yet spontaneously.



*Harold Low, for Justice, I.L.G.W.U.*

DOCUMENTARY REALISM. A detailed close-up of hands at actual work, symbolizing a craft and labor. The photographer used electronic flash "bounced" under a silvered umbrella because shop ceilings were high and dark and action was very fast.

## children—two approaches

the same subject, as seen by two young photographers:

MARC SLADE



When does a person take pictures in his own way?

On these pages we present a small sampling of the very individual work of two young photographers who, independently, have concentrated their Leica work on the same subject: children.

Comparisons are expected; indeed, invited. Beyond the first glance you will become aware of the distinguishing characteristics of each man's work. Once you have found out the true merits of each, there is an honest basis for comparison of the two. In the process, you may even discover something about your own photographic attitude toward children.

For, although both photographers have working methods that are similar, you will see that their results are quite different. To look at children through viewpoints that differ in a personal sense, is to be in touch with the different personalities behind the camera as well as with the subjects of the pictures. And that, after all, is what counts the most.

Marc Slade, 29 years of age, was born in Brooklyn. He has been photographing professionally for over ten years, and in the past few has embarked on a whirlwind career to make his interest "pay off big." Now, he works primarily for advertising agencies, and he does quite a lot of traveling to find new faces for his pictures. Not that he needs to go so far; it's just that he is "forever on the go," will think nothing of taking a plane to Florida just for a weekend, rest up, come back to the city, "ready to beat it up."

Whenever Slade travels, or just roams the streets of his neighborhood, he makes many new friends among the kids, and takes many new photographs. Parents are happy to have the unusual, candid shots

EDWARD WALLOWITCH



of their children—and especially to see them published—so Slade always presents prints and model fees in exchange for the necessary release forms. In this way he is constantly replenishing the lavish portfolio he presents to art directors, selling not only his "stock-in-trade" but winning many an assignment to photograph.

Edward Wallowitch, who is 25, was born in Philadelphia. When he was about 11, Edward became curious about some box cameras "lying around the house." After three years of what he calls "merely snapshots," he really began to see things when his artist-musician brother encouraged him to look for the graphic and meaningful elements in nature. He soon began to photograph the kids in the neighborhood and gradually his personality began to infuse into his photography. Within a few years he acquired his first Leica, a IIIf, which he is still using.

When only 17, his sensitive pictures drew the attention of an artist friend who made the young photographer aware that there were magazines existing that might publish his work. No sooner had one of his photographs and his work been published in a national magazine, than Wallowitch was being offered scholarships by art and photography schools. In 1950, at the recommendation of Edward Steichen, *U.S. Camera* awarded him a scholarship to the Institute of Design in Chicago. The impact of the one-year course at the Institute was with him when he returned to Philadelphia in 1951. After spending time "just loafing at odd jobs," he made up his mind to go to New York and try, in the commercial world, to do what he loved best: photograph in his own way.

**Slade**

IIIIf, 50mm Summitar, 1/100 at f/5.6.





**Slade**

IIIIf, 50mm Summitar, 1/60 at f/4.

IIIIf, 50mm Summitar, 1/60 at f/5.6.



IIIIf, 50mm Summitar, 1/60 at f/5.6.



M-3, 50mm Summicron, 1/200 at f/4.





M-3, 50mm Summicron, 1/100 at f/4.

## Wallowitch

IIIIf, 50mm Summarit, 1/200 at f/5.6.

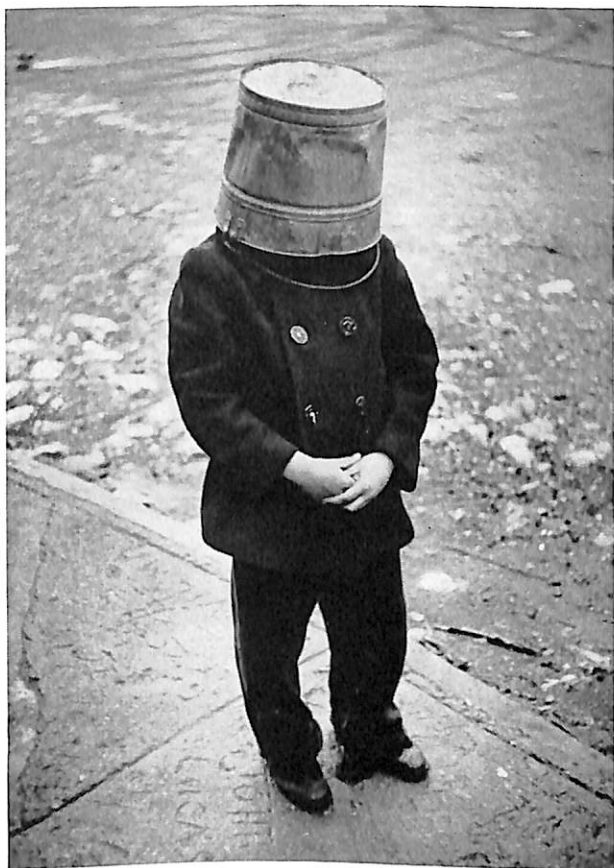




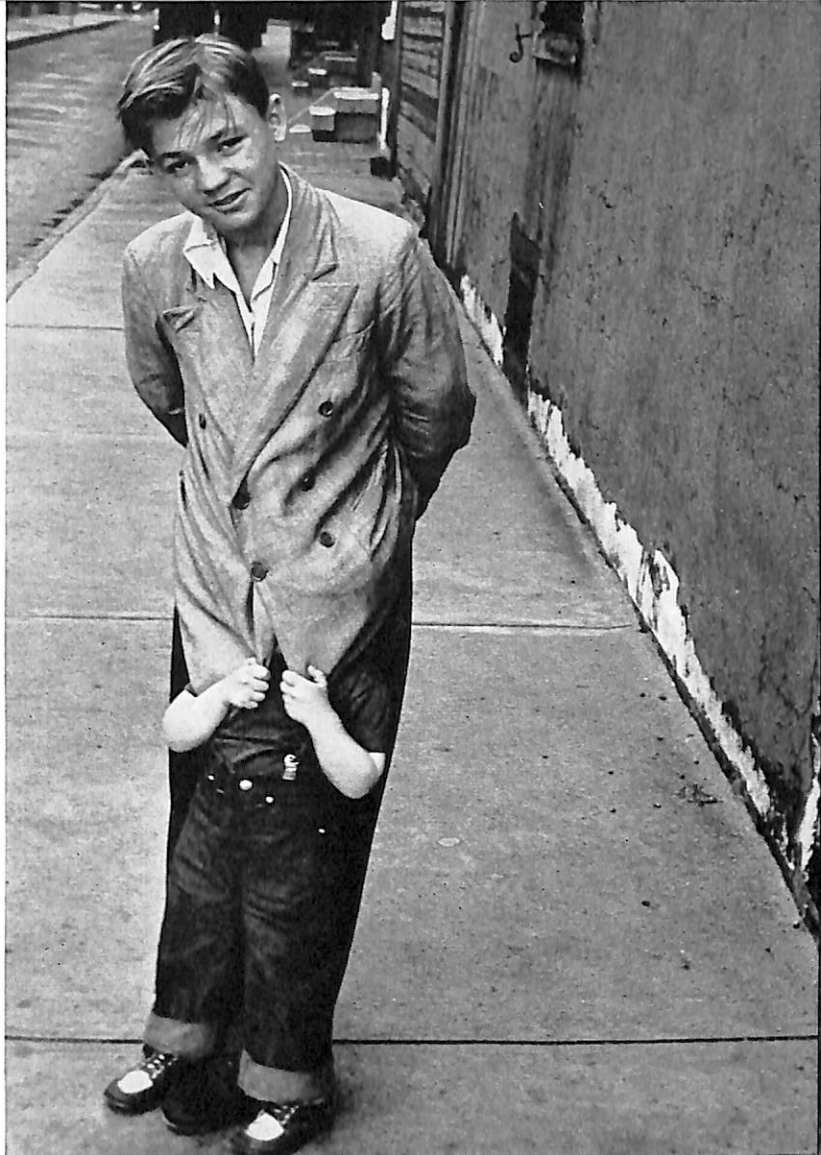
IIIIf, 50mm Summarit, 1/100 at f/5.6.



**Wallowitch**



IIIIf, 50mm Summitar, 1/60 at f/5.6.



IIIIf, 50mm Summitar, 1/60 at f/5.6.

IIIIf, 50mm Summitar, 1/60 at f/5.6.



IIIIf, 50mm Summitar, 1/50 at f/4.



IIIIf, 50mm Summitar, 1/60 at f/5.6.

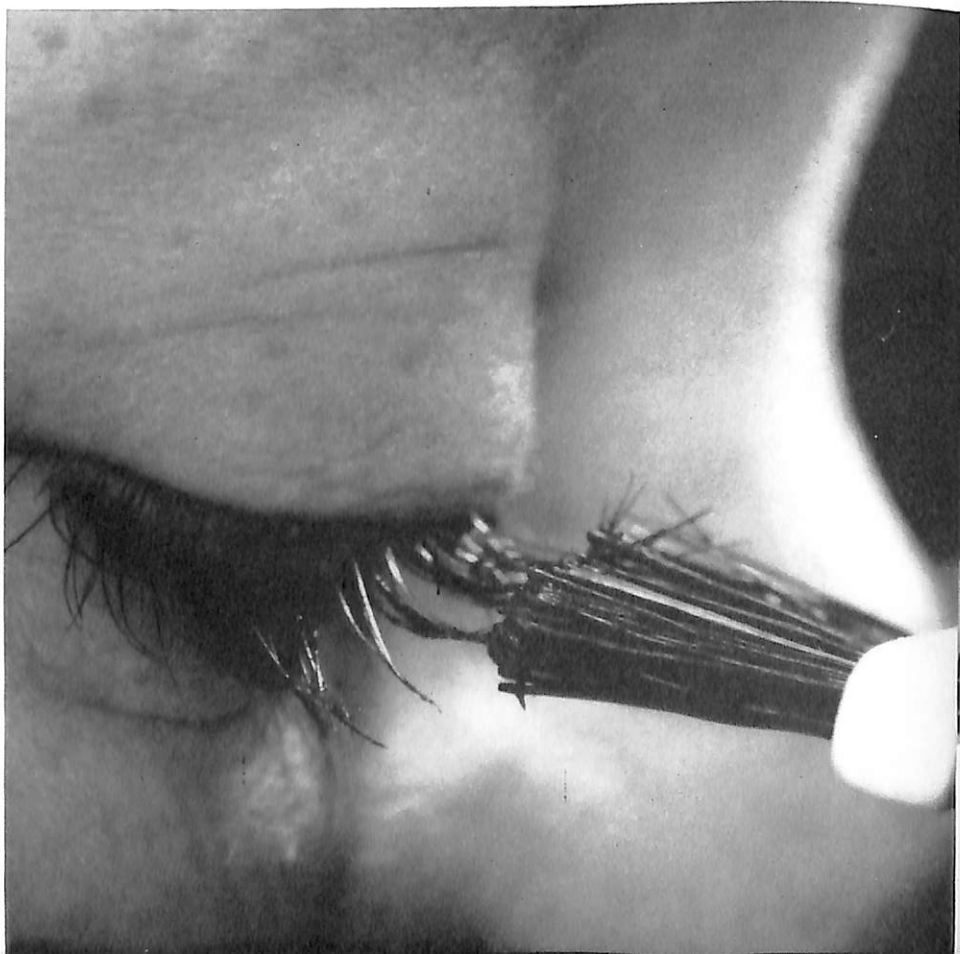


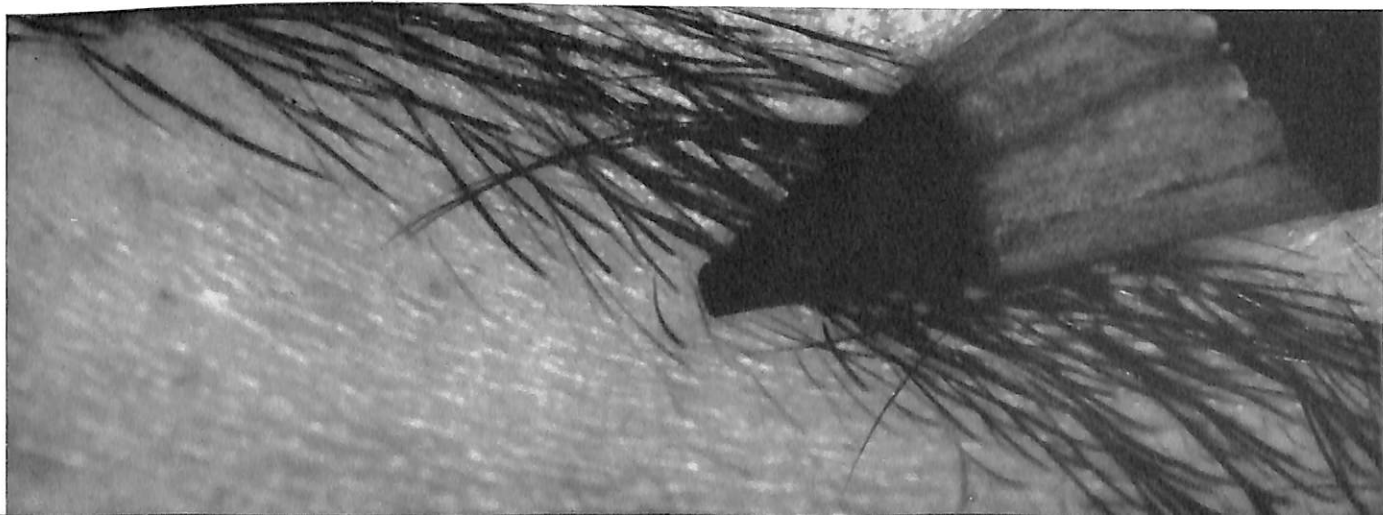
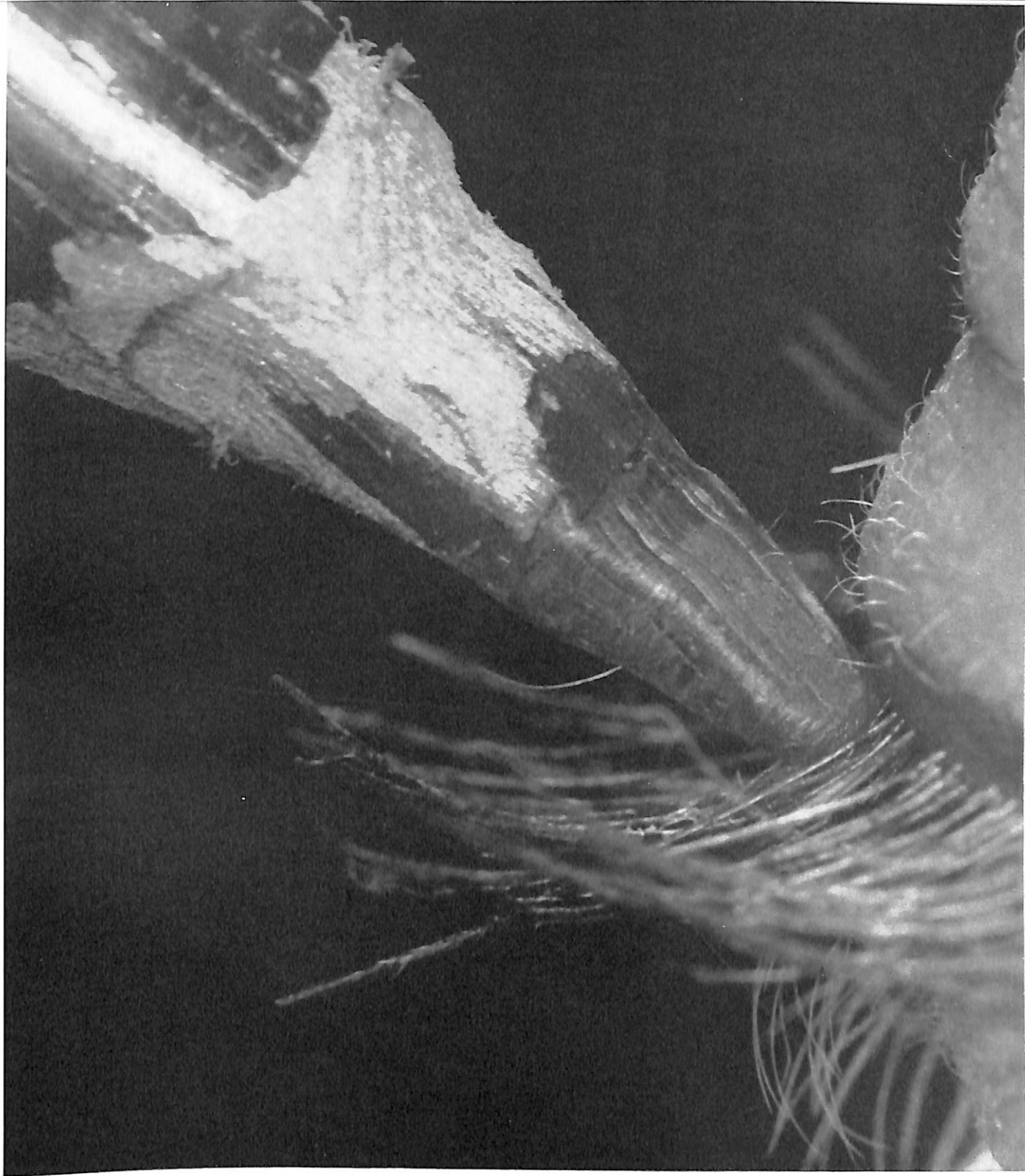


**does  
this  
look  
familiar?**

*"giants on the groundglass" is what  
the photographer saw—  
turn the page to see how the Leica  
was used to make these pictures*

*photographs by Maynard Frank Wolfe*







super close-ups of everyday activities give us an idea of how Gulliver must have felt

"Don't bother me, I'm putting on my lipstick. We've got to be there in 20 minutes." This mild protest came from my wife as I aimed close-up equipment at her while she rushed her make-up so that we could leave the studio. I focused closer and closer until the camera's lens was about six inches from her mouth. Looking through the focusing magnifier from such a close vantage point, I felt as if I were looking at a giant. I knew how Gulliver must have felt in Brobdingnag, where everyone was enormous except him. "Hold still! Hold still!" I said helpfully, "this looks interesting."

I can't remember if we were on time or not. But I knew that I was embarked on a series of photographs that would open up new areas of visual experience for me and for thousands of others who would see the resulting pictures in national magazines and Sunday magazine supplements.

These extra-close-ups are called macrophotographs—defined as the photography of small objects reproduced at natural or larger than natural size without a microscope. The main idea behind my own "macros" is that they are parts of complete photostories. I call them "Editorial Macrophotographs." To date, I have explored the close-up story of a woman (my wife) making up and a man shaving. This technique is now the basis for a series of advertising illustrations through which the client plans to show, on a more intimate plane, the use of his products.

The majority of macrophotographs are taken as records. They show a good, easily identified view of the subject, but one which is rather static. Editorial macrophotographs, on the other hand, must have the same "eye-stopping" appeal and storytelling quality that every good illustration has. My problem was to have the subject doing something that was visual in order to impart drama to the situation. To accomplish this, I had action going on which I stopped with lighting that reinforced the dramatic quality.

As always, the nature of the job dictated the choice of equipment to be used. I experimented with single-lens reflex cameras, then with various types of reflex housings. I finally settled on the Leica with the Visoflex and 45° angle magnifying viewer. It seemed the simplest and easiest equipment to use, and allowed the most freedom in following the action of the sub-



ject. The groundglass image was bright enough so that I could follow the action under focusing light even with the lens at  $f/22$ . I also used my Leitz Bellows with the 135mm Hektor lens. The Hektor was used because it gave the proper perspective for the majority of situations, and offered a good working distance from the subject. The working distances ranged from three to ten inches.

Proper illumination was the next key problem. Because of a need for the great depth of small apertures, intense light, stopping of motion, and cool light source, speedlight was the natural choice.

As a main source of light, I used a ring light. This type of electronic flash is a circular tube that surrounds the lens of the camera much in the same way a sunshade does. It gives shadowless illumination up to about three feet. However, it has a low guide number, and the small units available today are not practical at more than four feet. Also, using the ring light as the main source gave flatly-lit photographs. So, I had to use a second light to add drama and impact. This additional speedlight gave the subjects photographed a feeling of depth and modeling.

For the standard units I used a main light (Heiland Prox-O-Lite on a Heiland Strobonar 71-A power pack) and a sidelight (Heiland Strobonar 60 S). The latter is a self-contained speedlight small enough to go on a light stand. It has a built-in triggering circuit that allows the unit to be fired through a photoelectric eye when a unit that is synchronized to the camera is fired. Both units fire together so that there is perfect synchronization. Since no wires ran between the two units, I had flexibility in placing the second unit.

A 750-watt spotlight was used to light the subject for focusing. I left it on constantly since it did not affect the actual exposures. The shutter was set at 1/50 second, the speedlight synchronization speed, and the aperture was adjusted from the guide supplied with the Heiland Prox-O-Lite. Since the second light was used as a modeling light, I did not take it into consideration when computing exposure. Tests showed that, depending on working distance (from two to ten inches), the exposure ranged from  $f/11$  to  $f/22$ . The film used was Adox KB-14 or Kodak Pan-X developed in Neofin Blue longer than the recommended time to increase contrast.

## a NOMOGRAPH—for your convenience / Hy Becker

Have you ever wondered what focal length your lens should be to cover a specific field width when camera-to-subject distance is fixed? Or, how wide a field you can include from a fixed distance with the particular lens on your camera?

Most of the time your viewfinder gives you the answer visually. But what of those times when you want to know before you arrive on the scene? How can you tell how wide an area will be included by your 50mm lens when shooting from, say, 20 feet?

Mathematics will give you the answer—but who wants to do homework? Happily, you needn't. The correct *nomograph*, plus a ruler, will give you the answer to your questions even if you can't add two and two. A nomograph is a chart like the one on the other side of this page. It is designed so that by simply laying a straightedge through two known points of reference, you will locate a third unknown point or—the answer to your question.

The nomograph published in this issue concerns field widths as related to varying focal lengths and subject distances.

### how to use it

Using the chart is simplicity itself. For instance: you want to photograph some football plays from a spot on the sidelines. You know that the action will be about 200 feet away and you want to include an area about 30 feet wide in your pictures, to catch several players in action at the same time. Which focal length lens is best for the situation? To find out, lay a straightedge across the nomograph so that

it intersects the "DISTANCE IN FEET" scale about two-thirds of the way between 180 and 210, and the "FIELD WIDTH—IN FEET" scale at 30. The answer to which focal length to use to fill the negative area appears where the straightedge intersects the "Lens Focal Length" line—in this case 200mm. Naturally, a shorter lens will include a wider field, but, of course, the image will be smaller and need greater enlargement in printing.

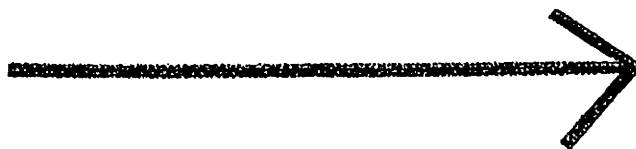
If you want to know how far back you will have to stand to include a known field, place the ruler to intersect the focal length of the lens and the field to be covered. The answer in this instance will appear on the "DISTANCE IN FEET" line. With a 50mm lens, for instance, you will need to stand about 8½ feet away to take a full-length picture of a man 6 feet tall.

If you know the subject distance, and the focal length is fixed, you can determine with the nomograph the *field* that will be covered.

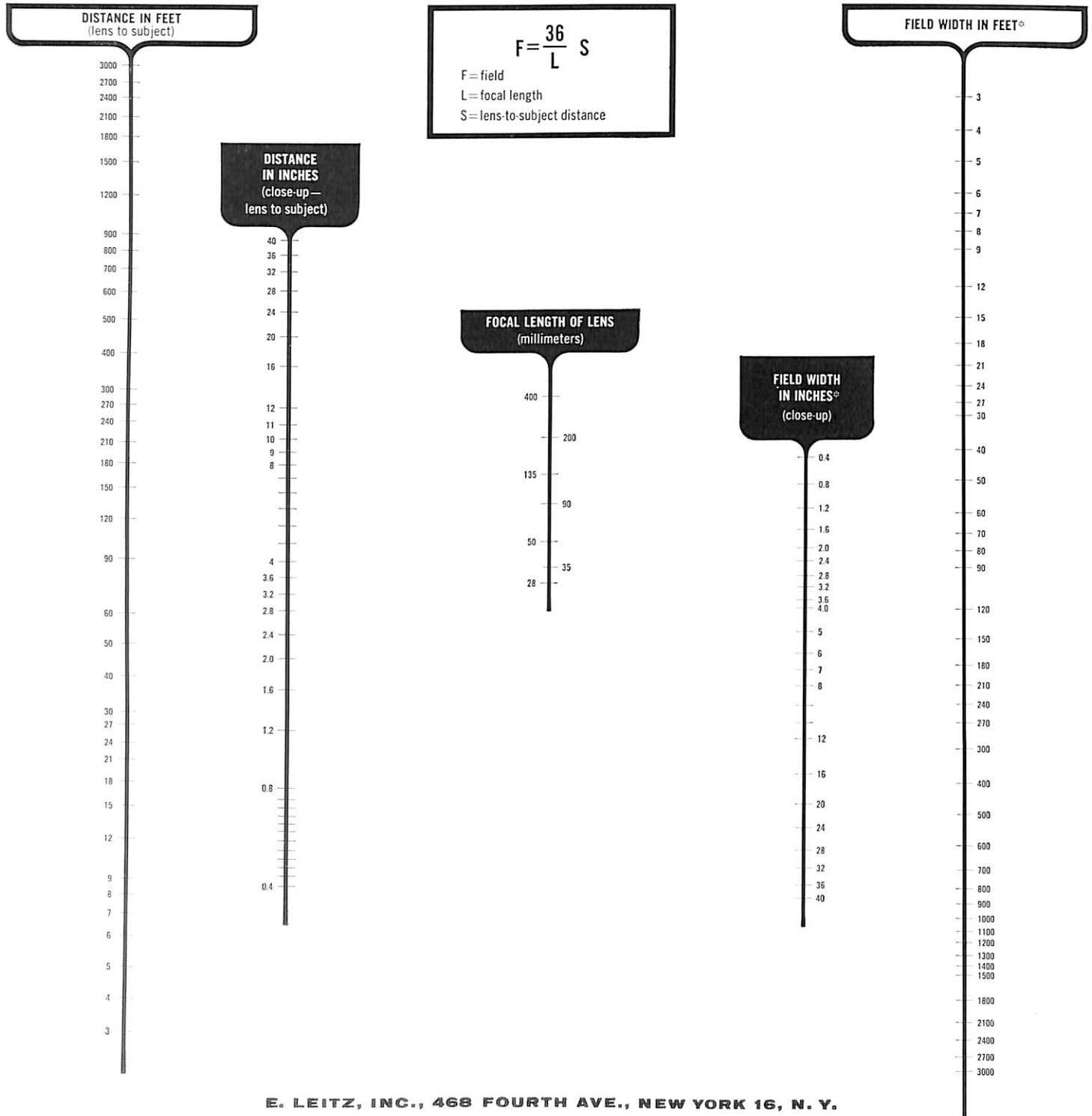
The "CLOSE-UP" scales are used in the same way as the other scales, except that they read in inches.

The formula which was used to work out this chart appears at the top of the next page. It gives you an idea of how much calculation a nomograph can save in solving your lens problems. (*The nomograph and text here are arranged "back-to-back" for your convenience. However, if you do not want to detach the page, you may secure a separate copy by writing to the Editor and enclosing a three-cent stamp for return postage. In future issues we hope to bring you nomographs covering other photo problems.—Ed.*)

for a quick solution to a lens problem,  
lay a straightedge on the chart on the next page



# NOMOGRAPH FOR LEICA EQUIPMENT



E. LEITZ, INC., 468 FOURTH AVE., NEW YORK 16, N. Y.

\*Field width is the longer dimension of the Leica format at the distance focused.



## four "impossible" pictures

*fly in flight*

*surf foam frozen on the beach*

*picture made without light*

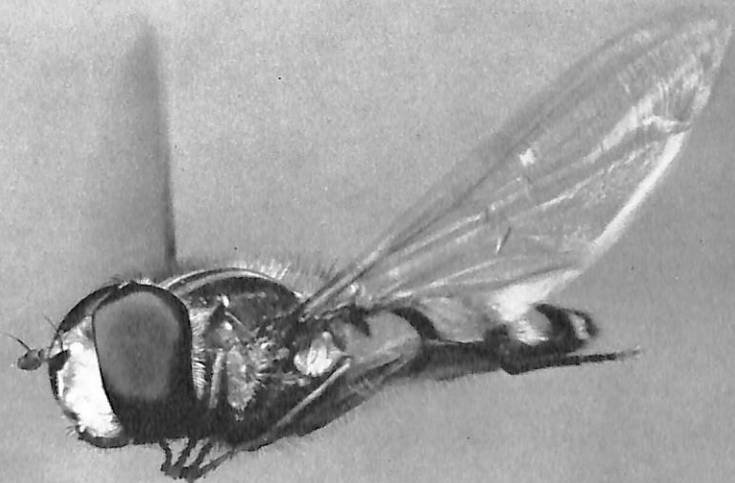
*and a moon within reach*

The wonders of photography are many. From a sheerly technical standpoint, the camera can show us things we have never really seen before, although they were there—somewhere—all the time! In imaginative hands, the camera becomes an almost fantastic extension of the human vision.

Bringing an object up so close as to take one's breath away. Magnifying a texture beyond everyday comprehension. Stopping motion that is so fast as to

show us that some things are ordinarily invisible! Fictional apparitions become factual images in front of the Leica's lens.

A boastful businessman once coined a phrase: "The difficult we do immediately; the impossible takes a little longer." Applying his claim to the Leica, we find slightly confusing. The *difficult* shot is the one that takes a little time. It is the impossible one—witness the photographs here—that is so easy.



*fly in flight*

What a revelation! A horsefly actually flying—how did the photographer do it? Reinhard Meis first captured the fly, then captured him on film, by patiently aiming his Leica IIIIf through a small transparent enclosure which held the flying insect. He used the Visoflex and Bellows Focusing Device to get a large image on Agfa Isopan FF film. With lens aperture set at  $f/16$ , the Braun Hobby electronic flash unit was fired in synchronization with the shutter, stopping practically all motion. Since the fly's wings are blurred, we have a good idea of how fast they beat because we know that Braun Hobby light fires at  $1/1000$  second!



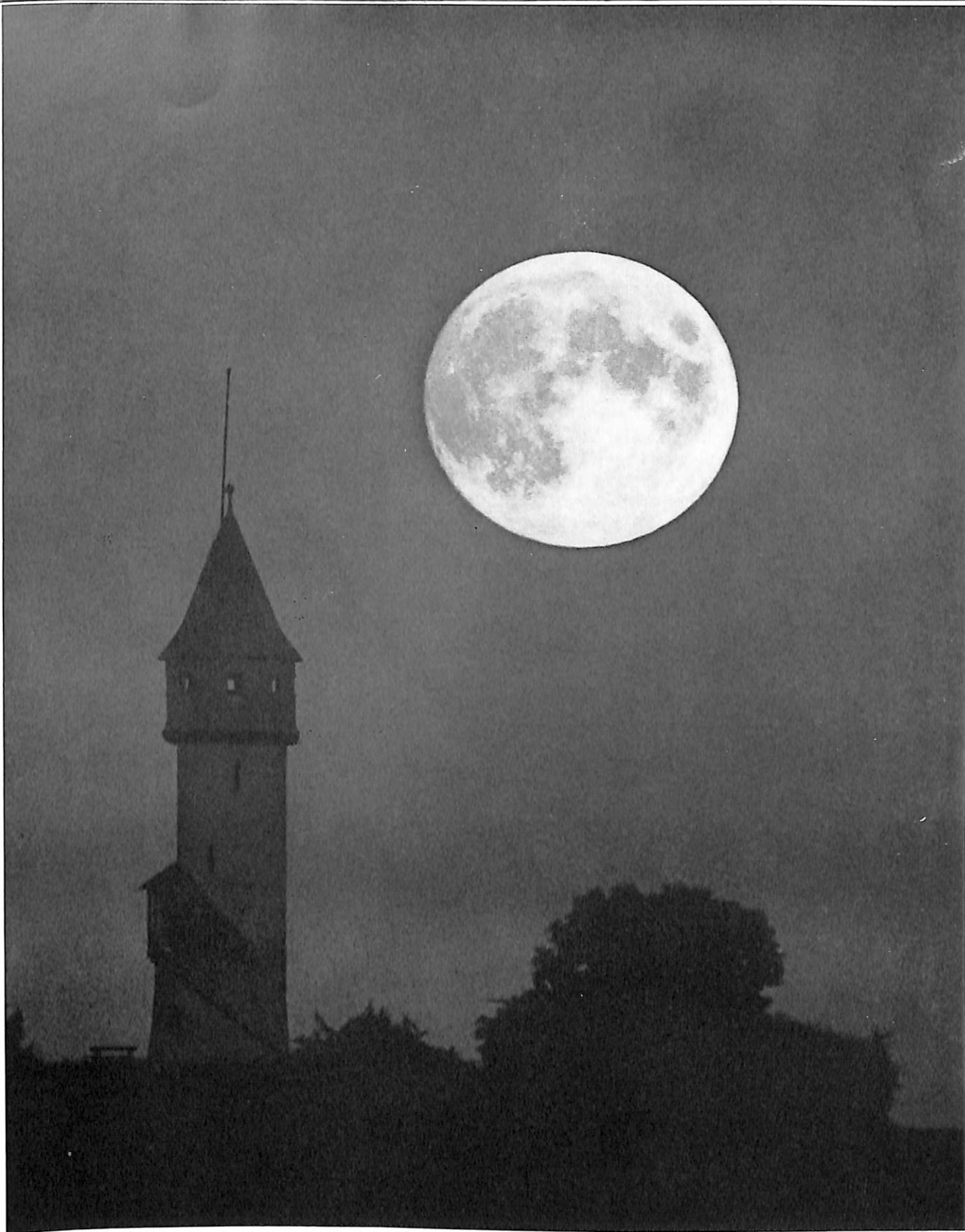
A fraction of a second later and there would be no foam. Siegfried Hartig used the high-resolution Adox KB-14 film to get maximum detail in this revealing photograph of receding surf. A shutter speed of only 1/100 second was required on the M-3, with 50mm Summicron lens set at f/5.6.

*surf foam frozen on the beach*

*picture made without light*



Actually there is light here, but it's coming from inside the plants, and it has been gathered by time. Allan Foott did many such experiments with his Leica. Bioluminescence, the emission of light from a living organism as a result of oxidation within, makes such pictures possible. In this case, **Pleurotus lampus**, a fungus, made its own photograph in "total" darkness, in one hour, at f/6.3 on Ilford HP3 film. It gave off enough light to make the matchbox Foott placed nearby register, too.



On a clear night, the moon usually looks like a disc, it's so bright. Through the magic of photography, more objective than the human eye, we see that the satellite is a globe, and, when magnified this much, it looks as if it were hanging in front of the watch-tower. It's all done with optics. Julius Behnke used a Leitz experimental telephoto lens of 600mm focal length. But anyone can secure a similar result with the Leitz 400mm Telyt and Visoflex—on a clear night.



## parallax—

### the difference between the same thing!

modern equipment solves this problem automatically

/ Arthur Kramer

Facetious as the title may sound, it does contain a measure of truth. The lens of the camera “sees” a scene and the finder of the camera also “sees” the scene. But the fact that the lens and finder are separated means that each sees the scene from different viewpoints. The discrepancy between the field covered by lens and the finder field is called parallax.

In practice, parallax, if not properly compensated for, can be a serious handicap. It means that the picture you see through the finder is not the picture you are getting! Current Leicas, of course, compensate automatically for parallax.

If you will examine both the Leica IIIg and the Leica M-3, you will see just how parallax compensation is accomplished. The basic parallax problem in the M-3 can be quickly analyzed by examining the camera. The center of the finder is about 2" away from the center of the lens—that is, approximately  $1\frac{1}{8}$ " to the right and  $1\frac{1}{8}$ " above the vertical and horizontal axes of the lens. So the finder would see a field to the left and above the actual picture area covered by the lens (see Fig. 1).

The Leica M-3, therefore, must compensate for a “dual” parallax, sideways and up-and-down. Before going into the mechanical details of how this is achieved, it should be pointed out that parallax compensation must be a “progressive” process. The amount of compensation varies with camera-to-subject distance. The effect of parallax error is far less at infinity than it is at 3 feet. This is because the error (the discrepancy between lens and finder views) is constant. If the finder and image are an inch apart, the one-inch displacement is negligible in a distant landscape scene. But in a portrait, a one-inch framing error can chop off an important area of the picture. Accurate parallax compensation devices, therefore, must be accurately linked to the focusing mechanism of the camera.

#### automatic compensation

Put an M-3 on a tripod or table top and look through the finder. Now, while watching the bright-line field frame, focus the lens from infinity to  $3\frac{1}{2}$  feet. Notice that the frame moves diagonally. To provide absolutely accurate framing, this movement must be critically coupled to the rangefinder movement.



Here's how it is done. As the M-3 lens is focused, it rides against a small wheel which operates a lever, swinging the focusing prism of the rangefinder. However, in addition, there is a cam on which ride the frames of the finder. This cam is wedge shaped precisely so that the finder frames move diagonally across the field as the lens is focused, insuring perfect parallax compensation at all distances—with all lenses which couple to the rangefinder.

This may seem like an extremely simple solution to a complex problem—and it is. But the final solution is found only through careful engineering. Once the proper positions for the field frames have been mathematically determined for each working distance, there is the painstaking job of designing and building an accurate, foolproof, mechanical linkage that translates the in-and-out motion of the lens into the proper diagonal motion of the frame finder. In the Leica M-3, accuracy is assured not only by carefully calculated design, but also by constructing the entire mechanism so that it will give dependable service, not only when new, but for the life of the camera. This means that each part must be machined to fit with accuracy and without play, yet operate smoothly without binding.

In the Leica IIIg, the parallax problem is somewhat simpler to solve because the finder is located almost directly above the lens. This means that there is virtually no “lateral” parallax problem—the only correction needed is vertical.

As you look through the finder and rotate the lens in and out through its entire focusing range, you will see the bright-line frame move up and down.

In the IIIg, vertical parallax compensation is accomplished (see Fig. 4) as the lens (A) rides against a wheel (B) which actuates the moving prism of the

rangefinder (D). As the wheel moves back and forth with the lens, its motion is transformed into an up and down motion by means of a vertically mounted roller arm. This roller arm, in turn, moves the mask of the finder frame (F) to correct parallax.

In the M-3 and IIIg, parallax is never a problem. Compensation is automatic, even with the 50mm Dual-Range Summicron at its closest focusing distance of 19 inches, or the 35mm "RF" Summaron which focuses from 26 inches to infinity!

#### accessory finders

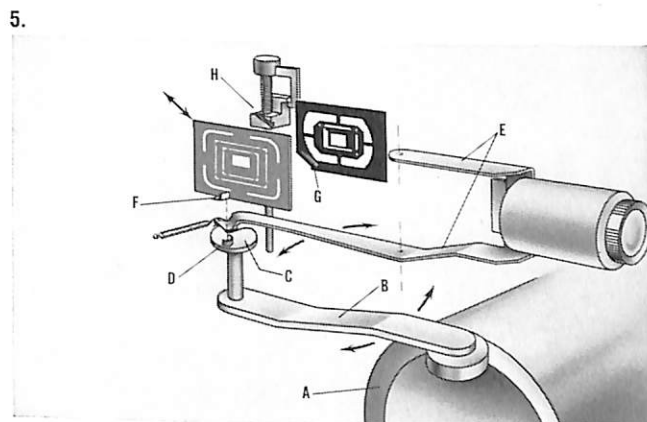
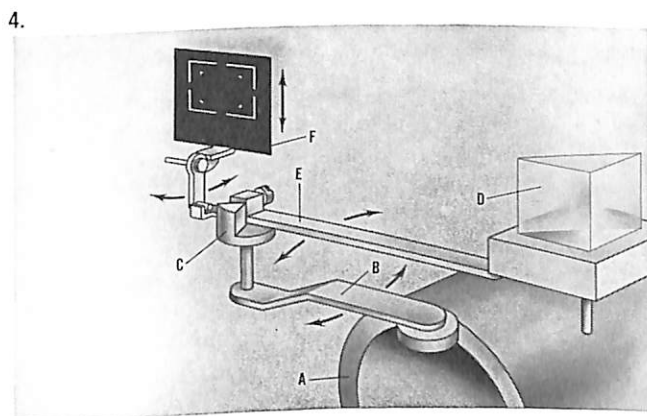
Simpler, but effective solutions to parallax errors are found in the Leica accessory finders. These finders are used mainly with Leicas which have no built-in finder, or whose finder delineates only the field of standard 50mm focal length, or they are used for special work such as sports and fast-action photography.

The Leitz Imarect Universal Viewfinder employs a lever which is marked for several subject distances.

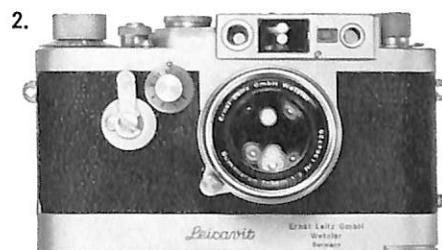
Setting the lever to the proper distance tips the finder downward enough to compensate for parallax. An extra indicator acts as a setting guide for distances closer than six feet, compensating for the slightly reduced field produced at close distances.

Compensation for parallax in the individual Leitz Optical-Brilliant finders for stereo, 35mm and 50mm lenses is accomplished by visual reference to the dotted line which appears in the finder. At distances below 10 feet, the dotted line, rather than the solid line at the top, is used as the upper limit of the picture area. Finders for the 85mm, 90mm and 135mm lenses feature an adjustable ring which can be set at the proper subject distance to compensate for parallax.

The Leitz Universal Frame finder, which has no optics, has a calibrated eyepiece which is raised or lowered to compensate for varying subject distances. The Sports Frame Finders for the 200mm and 400mm Telyt lenses have an adjustable ring calibrated with click stops for various subject distances.



1. PARALLAX is the difference in fields of view of two lenses (the viewfinder and the 'taking' lens) aimed parallel to each other.
2. FRONT-FACE VIEW of the Leica IIIg, which corrects parallax automatically, shows this difference to be primarily vertical when thinking in terms of a horizontal picture format.
3. LEICA M-3, with viewfinder above and aside from lens, compensates for parallax in a diagonal direction.
4. IIIg PARALLAX CORRECTION begins as lens barrel cam A presses against roller-arm B as lens is focused. This causes roller-arm to pivot the levers C and E. Lever E produces vertical motion in field frame F. Roller-arm also pivots rangefinder prisms D bringing double images of rangefinder into coincidence.
5. M-3 PARALLAX CORRECTION is basically like that in the IIIg. Lens barrel cam A and roller-arm B interact, causing disc C to rotate and pivot arm E whose lens assembly brings rangefinder images into coincidence. As C rotates, actuating stud D presses against frame stud F. Angle stud G of template G, which rests in guide slot H, is then forced into a diagonal motion compensating for both vertical and horizontal parallax. (Finder frames are shown separated and removed from the guide slot assembly to make details visible.)



## focusing on...

**"Leica World".** Have you added this book to your library yet? Its text and pictures, working together, give a vivid portrayal of the 35mm approach to photography, specifically in terms of the Leica. To judge from the reaction of leading photographers and camera editors, we would say that the book is a real contribution to photo literature. Here are what some of them have said about it:

**JACOB DESCHIN, THE NEW YORK TIMES:** "...a cross-section of today's achievement in black-and-white and in color, in exploring various facets of contemporary life on the creative level... One is delighted to see many familiar favorites along with some outstanding work by the newer photographers."

**LLOYD JONES, YOUNGSTOWN (OHIO) VINDICATOR:** "...a great book, featuring lively, dramatic pictures of our world today, captured with the versatile 35mm Leica camera; as seen 'through the eyes of great photographers'...not just another picture annual, but rather a book with a purpose..."

**ARTHUR ROTHSTEIN, LOOK:** "...interesting and well-written, with the picture selection on a high level. Every photographer would benefit from owning a copy."

**color courses.** Helen C. Manzer, FPSA, ARPS, one of the world's leading photographic exhibitors, also teaches photography. Besides courses in black-and-white and color at the Brooklyn (N. Y.) Central Y.M.C.A., she conducts special color-slide courses which offer photographers a chance to combine a vacation with expert photographic guidance.

This summer, Helen Manzer will hold two courses on California's Monterey Peninsula—first group from June 23 to July 5, second group from July 7 to July 18. You can get more information on the West Coast courses from Margaret E. Wilson, Box 68, Harper Canyon Road, Salinas, California.

Helen Manzer's East Coast courses offer a chance to photograph New England's colorful countryside in the famous Lakes Region of New Hampshire. First course is from August 4 to August 15; second course, August 18 to August 29. A special third course, featuring fall foliage, is from September 29 to October 3. More information on the New Hampshire series from Ruth L. Wiesen, 66 McGrath Street, Laconia, N. H.

**NOTE:** It has come to our attention that certain Braun Hobby equipment with serial numbers obliterated has recently appeared in the United States. E. Leitz, Inc., does not accept responsibility for such units; we regret we cannot accept them for repair.



DR. ELSIE KÜHN-LEITZ being greeted by Captain H. Lorenz of the liner *Berlin* on her return trip to Germany.

**distinguished visitor.** Dr. Elsie Kühn-Leitz, only daughter of the late Dr. Ernst Leitz, was a recent visitor to America. She traveled more than 20,000 miles through twenty-eight states, Canada, and Mexico and returned home with over 1000 Leica transparencies as mementos of her four-month visit. But Dr. Kühn-Leitz, who holds a law degree, came as more than a tourist. As a personal friend of German Chancellor Adenauer, Dr. Kühn-Leitz planned to give him, on her return home, her impressions of the economic, cultural, and political aspects of America as she had seen them. Visitors like Dr. Kühn-Leitz cannot help but strengthen understanding and respect among the free nations of the world.

**LEICA Ig.** A new model, the Ig, replaces the If as the "basic" Leica. It has a full range of automatic shutter speeds from 1 second to 1/1000 second and "bulb". It also features built-in automatic flash synchronization for both conventional and electronic flash units. Since it was designed with industrial and scientific photographers in mind, it does not have the built-in rangefinder and viewfinder. But for general photography, separate viewfinder and rangefinder may be added. Or the Ig can be converted to a IIIfg at any time by having the built-in rangefinder and viewfinder, and self-timer added. The Ig, with 50mm Elmar f/2.8 lens and Optical-Brilliant viewfinder, but without rangefinder, is \$176.70, including tax.





In the event that the purchaser of new equipment, entitled to a free subscription period, is on the paid subscription list, he will be refunded the portion of his subscription payment corresponding to the unexpired portion of his paid subscription.

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If you purchased a new\* Leica camera or Leitz lens prior to 1958, you can continue to receive LEICA PHOTOGRAPHY as outlined in the box below:

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1956	1959
1957	1960
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IMPORTANT: In order to continue to receive LEICA PHOTOGRAPHY, under the new plan, you must complete and return the enclosed business reply card, which bears your name and address exactly as it appears in our records. Be sure to enter the serial number and type of your latest camera and lens purchase that was registered with us. You need not list all Leitz equipment you own, but only that which qualifies you to receive LEICA PHOTOGRAPHY under the new plan, specified in the box above. This card may also be used to order paid subscriptions.

LEICA PHOTOGRAPHY will continue as a quarterly magazine with examples of outstanding Leica work and suggestions for getting the very best results from your Leica camera and its accessories. We hope that it will continue to inform and entertain you and add to the pleasure you get from your equipment.

Sincerely yours,



T. G. Reardon  
Circulation Manager

\*A new Leica camera or Leitz lens is one which has been imported and distributed by E. Leitz, Inc. through its franchised dealers to the first owner. Such cameras and lenses can be identified by the registration card furnished by E. Leitz, Inc. with each new camera or lens.



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